# Bottlenecks in the Growth of Coastal Shipping

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## **Foreword**

The India Resident Mission (INRM) Policy Brief Series is sponsored by the Asian Development Bank (ADB) and is designed as a forum to disseminate findings from policy research work undertaken on the Indian economy. The series is primarily based on papers prepared under the Technical Assistance (TA) 'Policy Research Networking to Strengthen Policy Reforms in India'. The main purpose of the TA was to provide assistance for developing policy research networking capacity, in order to build support for, and consolidate the reform process. The INRM Policy Briefs provide a nontechnical account of important policy issues confronting India.

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# Bottlenecks in the Growth of Coastal Shipping

## S. Sundar and Pragya Jaswal

Transport demand in India has grown at 8.5% in the past decade. About 65% of the freight is carried by road and about 35% by rail. Road transport imposes substantial costs on the economy from congestion, accidents, energy consumption, and environmental damage.

Coastal shipping is environment-friendly and much safer. Fuel consumption for every ton-kilometer of freight carried is only 15% of that by road and 54% of that by rail. The emissions (except  $SO_2$ ) also are much lower than in rail or road transport. Coastal shipping is also more suited to handling bulky consignments. Coast-to-coast carriage of goods by coastal shipping costs 21% that by road and 42% that by rail. I

India has a coastline of around 7500 km and a number of major and minor ports. An optimal mix of road, rail, inland water transport, and coastal shipping will provide an efficient transport infrastructure with mobility, flexibility, and energy and cost efficiency.

Road transport has an edge over rail or water transport because most of the production and consumption centers are landlocked. Also, it provides door-to-door movement. Over the years, there has been substantial investment in its infrastructure. Coastal shipping, on the other hand, involves double-handling costs. Lack of policy measures to promote coastal shipping is another reason why it accounts for only 7%

<sup>&</sup>lt;sup>1</sup> TCS (Tata Consultancy Services), Study on Development of Coastal Shipping and Minor Ports, prepared for Government of India, Ministry of Shipping, December 2003.

of domestic cargo movement. The average public sector investment in shipping in the five-year plans was only 5% (almost entirely allocated to overseas shipping) as against 51% for railways and 32% for the road sector. Maritime states and the Government of India have invested scantily to develop minor ports to create earmarked facilities for coastal cargo. Other factors that have slowed down the growth of coastal shipping are:

- Cumbersome customs procedure
- Nonavailability of concessional finance to acquire coastal vessels
- High import duties on bunker oil and spares
- High manning scales which increase operational costs
- Stringent specifications relating to construction of vessels, leading to higher capital costs
- Incidence of corporate tax for coastal as against tonnage tax for oceangoing vessels and personal income tax which discourages quality officers from continuing on Indian coastal vessels
- Lack of separate berthing facilities at major ports and inadequate cargo handling facilities at minor ports.

This paper examines the recommendations of committees that have studied coastal shipping, notably the Afzalpurkar Committee (1993), Pinto Committee (1997), Tenth Plan Sub group (Coastal Shipping 2001), and TCS (2003) and suggests additional measures.

### **Recommendations**

#### Cabotage Law

Cabotage law in most countries reserves the movement of coastal trade to their own flag vessels. Policy measures involve crewing restrictions, ownership restrictions, provision for domestic fleet subsidy, reflagging restrictions, etc. In India, the Merchant Shipping Act bars foreign bottoms from carrying cargo between Indian ports; exceptions are made if no suitable Indian vessel is available. The market of shipping industry being highly volatile, such protection creates a certain degree of stability for the Indian bottoms.

There is a view that in India cabotage restrictions discourage the growth of coastal shipping insofar as Indian tonnage is not adequate,

and Indian industry is not aggressive enough, to increase the share of coastal shipping. It is also argued that international competition would bring about greater efficiency. A counter-argument is that relaxing cabotage laws will tilt the scales against Indian shipping. Ships with foreign flags are not bound by restrictive manning norms, including minimum remuneration, and usually operate under favorable foreign taxation rules and subsidies.

However, if the primary objective is to increase coastal shipping and make coastal tonnage competitive it might be desirable to allow foreign vessels to compete for coastal cargo. Cabotage laws can any time be reintroduced when there is sustained growth in coastal cargo.

#### Ship Acquisition

One reason why coastal tonnage has been stagnant, apart from the low profitability of coastal shipping, is the difficulty in getting finance at low interest rates. Although coastal ships are entitled to external commercial borrowing, they cannot effectively do so as they do not earn in foreign exchange. With the winding up of the Shipping Development Fund Committee and Shipping Credit and Investment Corporation of India Ltd (SCICI, which has now merged with ICICI), companies have to rely on traditional bank funding. These banks are not equipped to deal with the financing of ships; this also involves high interest rates and short maturity. There is, therefore, a case for developing specialized wings in development financial institutions to fund coastal shipping.

### **Import Duties**

Coastal ships, unlike oceangoing vessels, have to pay duties on bunker oil. Bunker fuel oil for a coastal vessel is estimated to cost about 28% more than for an oceangoing vessel and around 36% for high flash high speed diesel.<sup>2</sup> On the other hand, the diesel used in road transport is subsidized.

Import duties on capital goods and spares also cast a burden on coastal vessels, which depend heavily on imported spares. Only if the ships are repaired at ship repair units registered with Director General Shipping, the imported spares are not subject to taxes. Given that coastal shipping is much more environment-friendly and fuel-efficient

<sup>&</sup>lt;sup>2</sup> Ibid.

than any other mode of transport, there is a case for providing tax concessions both for fuels and spares.

### **Manning Scales**

Coastal ships have to comply with manning scales applicable for near coastal vessels that ply between India, Bangladesh, Sri Lanka, and the Maldives. Earlier, manning scales of oceangoing vessels applied. There is a case for reviewing both manning scales and qualifications. A study by the Tata Energy Resources Institute (TERI) in 2003 indicated that because of manning scales, taxes, and other benefits, staff cost on Indian oceangoing vessels was higher than on foreign vessels.

Wages still constitute a substantial portion of the cost of operation of vessels. Qualified officers prefer to work on oceangoing vessels. Considering that coastal vessels do not have to conform to the different conservancy and safety requirements in different foreign ports and face the hazards of the high seas, there is a strong case for revisiting the issue of safety. International Maritime Organization (IMO) regulations relating to Standards of Training, Certification, and Watchkeeping (STCW, a key aspect of human resource development for onboard ship functions) also permit setting different norms for coastal vessels. In order to ensure adequacy of staff, there is also a case for building a separate cadre of seafarers for coastal shipping with qualifications different from those for oceangoing vessels.

#### Cost of Vessels

Coastal vessels are constructed to specifications of oceangoing vessels even though they are not subject to the same stress and turbulence. This needlessly increases their capital costs. There is a need to suitably amend the Merchant Shipping Act or enact separate legislation for coastal shipping to provide different specifications and lower manning scales.

#### **Taxation**

Corporate Tax. Till recently, Indian shipping companies had to pay corporation tax at 36.75% or the minimum alternate tax at 7.5%. The industry also enjoyed benefits under Section 33 AC of Income Tax Act in which amounts transferred to a reserve specified under this section were not considered as a part of book profits. In the Union Budget 2004-5 tonnage tax has been adopted. Shipping companies

with oceangoing vessels have the option of choosing between corporate tax and tonnage tax, but not coastal shipping companies. This would act as a further disincentive for investment in coastal tonnage; oceangoing vessels are also not entitled to tonnage tax on coastal movement. Tonnage tax should also be extended to coastal fleet.

Personal Income Tax. Indian seafarers employed on foreign vessels or Indian vessels which ply outside Indian territorial waters for more than 183 days in a year are entitled to nonresident status and pay no taxes. This does not apply to officers and seafarers on coastal ships.

#### **Ports**

Coastal shipping, like international shipping, requires efficient bulk cargo handling and speedy berthing facilities. Coastal shipping in addition requires concessional port tariff. Major ports give second preference to coastal vessels in handling since oceangoing vessels generate more income. Major ports also lack identified berths for coastal shipping. Port tariff is determined by the Port Trust concerned with the approval of Tariff Authority for Major Ports (TAMP). At the instance of government, coastal vessels now enjoy a 40% concession in vessel-related tariffs and cargo handling charges (except for thermal coal, crude oil, and petroleum/oil/lubricants (POL)) as compared to oceangoing vessels. There is a need to fix the tariff at low levels instead of relating it to the tariff of oceangoing vessels, which are periodically revised and thus create an element of uncertainty. Also, the ad-valorem tariff at major ports makes the movement of high-value goods like cars by coastal vessels uneconomical. For instance, at the Jawaharlal Nehru Port Trust (1NPT) port, wharfage charge on motor vehicles and equipment is 0.5% of the cost, insurance, and freight (CIF) value for imports, 0.5% of the free-on-board (FOB) value for export and 0.65% of the CIF/ FOB value for transhipment.<sup>3</sup>

As regards minor ports, connectivity with rail and road has been a major constraint in addition to inadequate cargo handling facilities. TCS has identified fourteen minor ports for development and estimated the investment required. Most of the maritime states are making efforts to develop minor ports—which is a state subject—and through

<sup>&</sup>lt;sup>3</sup> http://www.tariffauthority.org/ as on 10 December 2004.

private investment. Ultimately, however, this depends on growth in cargo. Hence, both issues need to be addressed together.

Along with their development it is necessary to provide for connectivity of minor ports with the road and rail network. Ports like Pipayay languished for lack of connectivity; the Pipavav-Surendranagar rail link was established in joint venture with Indian Railways. It is understood that phase 3 of the National Highway Development Program would provide for connectivity to the minor ports: this needs to be accorded high priority.

#### **Custom-designed Vessels**

It is also necessary to customize roll-on-roll-off (Ro-Ro) vessels, silo vessels, etc. to facilitate the movement of trucks over long distances and cargo like cement and foodgrains. Konkan Railways has demonstrated that Ro-Ro wagons can effectively reduce movement by road; Gujarat Ambuja Cement moves significant quantities of cement in silo vessels.

Similarly, the use of catamarans and hovercraft to move passengers, for example from Mumbai to Navi Mumbai and between cities on the Konkan coast needs to be encouraged. The Shipping Corporation of India (SCI) used to run a passenger ship between Mumbai and Goa. but no longer. Specific origin and destinations (O-D) need to be identified for the transportation of passengers through coastal vessels.

### **Enabling Legislation**

The Merchant Shipping Act, 1958, deals both with oceangoing vessels and coastal ships and sets equal standards and norms for both. The Pinto Committee recommended enactment of legislation to deal exclusively with coastal shipping. A follow-up committee was constituted in 1998. Government should now move forward on the matter.

#### Cargo Potential

TCS projections for coastal traffic are for an increase from 54 million tons (MT) in 2001-2 to 83.28 MT in 2006-7 and 107.08 MT in 2011-12. TCS has further studied the economics of cargo diversion using certain criteria of land and sea distances between different O-D locations, quantity of goods, and cargo categories. Handling costs, bunker costs, standing costs, port tariffs, land movement costs, inventory costs, and external costs have been taken into reckoning. The study indicates

that diversion is viable in 68% of the cases. For instance, for a total land lead < 50 km and sea distance < 500 km, transportation by sea for some O-D pairs is financially viable compared to transportation by road. Similarly, for a total land lead < 50 km and sea distance 500-1000 km it was viable for steel sheets and coils; but for sponge iron and pig iron carriage by rail was more economical. The cargo projections are for commodities traditionally moved through coastal shipping and do not seem to include commodities like cars and other high-value lowvolume items and trucks through Ro-Ro vessels. These findings should therefore be treated as indicative.

The study indicates that handling cost, charter hire cost, port dues, and bunker costs make up the major portion of the cost of coastal transportation. Handling costs range between 35 and 50%, charter hire between 20 and 33%, port dues between 10 and 20%, and bunker costs between 13 and 30%. Coastal shipping can be made viable through reduction especially in handling costs and charter hire cost. With the development of coastal shipping and minor ports, a vessel should be encouraged to call at more than one port. Introduction of liner services between selected ports is another major recommendation.

The focus needs to be on providing a level playing field for coastal shipping and reducing transaction costs. Cargo reservation is not an answer: the consignor should be free to choose the mode of transport. What is essential is to identify specific O-D pairs on which identified cargo can move at lower costs through coastal shipping than by road/ rail and create the necessary handling facilities at both ends. The selection of minor ports should be done on this basis.

### The Way Forward

Some possible policy initiatives and fiscal and financial incentives to encourage coastal shipping are:

- Review cabotage laws
- Exempt customs duties on spares and bunker fuel
- Extend tonnage tax to coastal shipping
- Consider possible reduction in manning norms
- Review design specifications
- Ease ship acquisition by making available capital under more attractive conditions

- Enable this sector to offer more attractive employment opportunities to officers and seafarers
- Provide earmarked facilities at major ports, develop minor ports for coastal shipping, and reduce port charges for coastal shipping
- Provide for connectivity between ports and the road/rail network
- Enact legislation to deal with coastal shipping.

Fiscal benefits should be provided to those who move cargo by coastal shipping as is being done in other countries. It is understood that the Netherlands provides a fiscal incentive equivalent to the freight cost incurred in coastal transport. Similarly, government should consider allowing a credit of say about 150% of actual freight cost in calculating the taxable income of the consignor company on the lines of the tax benefit provided for research and development in the automobile industry in the recent budget. The loss of revenue to government would be more than offset by the savings in cost of oil imports and in overall external costs. There could be misuse of this concession but if it is limited to bulk cargo like coal, fertilizers, iron ore, etc. the beneficiaries would be large corporate entities who are subject to audit.